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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* EDWARD O. CLAPPER

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Appeal 2009-000033  
Application 10/020,483  
Technology Center 2100

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Decided: April 22, 2010

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*Before* JAMES D. THOMAS, JOSEPH L. DIXON, and  
DEBRA K. STEPHENS, *Administrative Patent Judges*.

STEPHENS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) (2002) from a final rejection of claims 5-30. We have jurisdiction under 35 U.S.C. § 6(b) (2008).

We REVERSE.

*Introduction*

According to Appellant, the invention relates to using a search engine to find information via a sequence of syllable counts (Spec. 1, ll. 7-8). A search string that comprises a sequence of syllable counts or complete words and syllable counts are input to a search engine that utilizes pattern-matching algorithms to search a document database for matches (Abstract).

STATEMENT OF THE CASE

*Exemplary Claim*

Claim 5 is an exemplary claim and is reproduced below:

5. A method comprising:

a computing device receiving a search string including an ordered sequence of syllable counts;

comparing the ordered sequence of syllable counts with the contents of a database of analyzed documents, each document comprising a plurality of words; and

retrieving from the database a document uniquely represented by the search string.

*Prior Art*

Erickson	5,765,152	Jan. 9, 1998
Wu	5,991,756	Nov. 23, 1999
Berke	US 6,629,092 B1	Sep. 30, 2003

Funaki

US 6,689,946 B2

Feb. 10, 2004

### *Rejections*

Claims 5-8, 10, 11, 13-15, 17, 20-22, 24, and 27-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Funaki and Berke.

Claims 9, 16, and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Funaki, Berke and Erickson.

Claims 12, 18, 19, 25, 26, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Funaki, Berke, and Wu.

### GROUPING OF CLAIMS

(1) Appellant argues claims 5-8, 10, 11, 13-15, 17, 20-22, 24, and 27-29 as a group (App. Br. 11). We therefore treat claims 6-8, 10, 11, 13-15, 17, 20-22, 24, 27-29 as standing or falling with representative claim 5.

(2) Appellant argues claims 9, 16, and 23 as a group on the basis of claim 5 (*id.* at 15). We therefore treat claims 9, 16, and 23 as standing or falling with representative claim 5.

(3) Appellant argues claims 12, 18, 19, 25, 26, and 30 as a group (*id.* at 16) based on claim 5. We therefore treat claims 12, 18, 19, 25, 26, and 30 as standing or falling with representative claim 5.

We accept Appellant's grouping of the claims. *See* 37 C.F.R. § 41.37(c)(1)(vii).

### ISSUE

*35 U.S.C. § 103(a): claims 5-8, 10, 11, 13-15, 17, 20-22, 24, and 27-29*

Appellant asserts their invention is not obvious over Funaki and Berke because neither Funaki nor Berke, taken alone or in combination, teaches or suggests “an ordered sequence of syllable counts” as recited in the

independent claims on appeal (App. Br. 11). Instead, Appellant contends, Funaki detects the number of syllables in a given melody and matches words that have the same number of syllables from a “poem piece data bank” (App. Br. 12).

The Examiner finds Funaki teaches a dictionary that stores the number of syllables of words based on calculations using syllable number count rules (Ans. 10). The Examiner points to Figure 12 to show a Japanese word (line 17) in the dictionary is a Japanese word that has syllable counts of 2, 3, and 4 (Ans. 10). Thus, this shows an ordered sequence of syllable counts (*id.*).

*Issue:* Has Appellant shown the Examiner erred in concluding the combination of Funaki teaches “an ordered sequence of syllable counts?”

## FINDINGS OF FACT (FF)

### *Funaki Reference*

(1) Funaki relates to techniques that aid in composing words of a song (col. 1, ll. 9-10). A conventional word composing apparatus divides music into a plurality of paragraphs (col. 1, ll. 15-16). A word composing condition is set for each paragraph; words that match the word composing condition from a “poem piece data bank” are derived and presented to a user who then selects a word to be stored (col. 1, ll. 15-19).

(2) The apparatus will also detect the number of syllables for a given melody and match the number of syllables for the words with words from the “poem piece data bank” (col. 1, ll. 20-22).

(3) The apparatus counts the number of syllables of a word based upon syllable number count rules (col. 9, ll. 59-60). The number of syllables of each word may be calculated in advance based upon the suitable number count rules and stored in the dictionary as shown in Figure 12 (col. 9, ll. 61-64). Figure 12 is shown below.

**FIG.12**

WORD 言葉	PART 品詞	# of syllables 音数
act	n	1
action	n	2
ah	int	1
:	:	:
beautiful	a	3
beauty	n	2
:	:	:
:	:	:
アーチ	名詞	1,2
あい	名詞	1
あいきどう	名詞	4,5
...	...	...
いしゃ	名詞	2
いか	名詞	2
いもほり	名詞	2
...	...	...
かあさん	名詞	2,3,4
かんたん	形容動詞	2,3
...	...	4 ...

Figure 12 of Funaki reference: Excerpt from a dictionary showing Words and # of syllables

## PRINCIPLES OF LAW

### *Obviousness*

“Obviousness is a legal conclusion based on factual determinations.” *Aktiebolaget Karlstads Mekaniska Werkstad v. U.S. Int’l Trade Comm’n*, 705 F.2d 1565, 1575 (Fed. Cir. 1983) (citation omitted). Four factors are considered in making this determination: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) any objective indicia of non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

## ANALYSIS

We find the Examiner has not shown that the proffered combination of references teaches “an ordered sequence of syllable counts” as claimed. The Examiner points to teachings by Funaki as disclosing this limitation. We find, however, that based on the record before us, Funaki teaches the number of syllables for a given melody are detected and matched with words from a “poem piece data bank” not a sequence of syllables (FF 2). Further, the Examiner’s reliance on the dictionary shown in Figure 12 is misplaced. The dictionary shown indicates that various Japanese words may have differing syllable counts depending on how the word is pronounced (FF 3 and Fig. 12) but the Examiner has not shown that this is a search string including an ordered sequence of syllable counts.

The Examiner has not presented any findings that Berke cures this deficiency. Thus, based on the record before us we find neither Funaki nor

Berke, taken alone or in combination, teaches or suggests an ordered sequence of syllable counts. Accordingly, we find neither Funaki nor Berke, taken alone or in combination, teaches or suggests the disputed limitations of claim 5. (*See also* commensurate language in claims 13, 20, and 27.)

*35 U.S.C. § 103(a): claims 9, 16, and 23*

Claims 9, 16, and 23, rejected for obviousness over Funaki, Berke and Erickson, depend indirectly from claims 5, 13, and 20. We found in Issue 1, that Funaki does not teach “an ordered sequence of syllable counts.” The Examiner has not presented any arguments or evidence that either Berke or Erickson, taken alone or in proper combination, cures this deficiency. Therefore, we conclude that the Examiner erred in rejecting claims 9, 16, and 23 for obviousness over Funaki, Berke, and Erickson.

*35 U.S.C. § 103(a): claims 12, 18, 19, 25, 26, and 30*

Claims 12, 18, 19, 25, 26, and 30, rejected for obviousness over Funaki, Berke and Wu, depend directly or indirectly from claims 5, 13, and 20. We found in Issue 1 that Funaki does not teach “an ordered sequence of syllable counts.” The Examiner has not presented any arguments or evidence that Wu or Berke, taken alone or in proper combination, cures this deficiency. Therefore, we conclude that the Examiner erred in rejecting claims 12, 18, 19, 25, 26, and 30 for obviousness over Funaki, Berke, and Wu.



## CONCLUSION

Appellant has shown the Examiner erred in concluding that the combination of Funaki and Berke renders independent claims 5, 13, 20, and 27 unpatentable. Since claims 6-8, 10, 11, 14, 15, 17, 21, 22, 28 and 29 depend from the independent claims, the Examiner erred in concluding the proffered combination renders claims 6-8, 10, 11, 14, 15, 17, 21, 22, 28 and 29 unpatentable. Accordingly, Appellant has shown the Examiner erred in rejecting claims 5-8, 10, 11, 13-15, 17, 20-22, 24, 27-29 under 35 U.S.C. § 103(a) for obviousness over Funaki and Berke.

The Examiner also erred in concluding that the combination of Funaki, Berke, and Erickson, taken alone or in combination, render claims 9, 16, and 23 obvious. Accordingly, the Examiner erred in rejecting claims 9, 16, and 23 under 35 U.S.C. § 103(a) for obviousness over Funaki, Berke and Erickson.

Similarly, the Examiner erred in concluding that the combination of Funaki, Berke, and Wu, taken alone or in proper combination, render claims 12, 18, 19, 25, 26, and 30 obvious. Accordingly, the Examiner erred in rejecting claims 12, 18, 19, 25, 26, and 30 under 35 U.S.C. § 103(a) for obviousness over Funaki, Berke and Wu.

## DECISION

The Examiner's rejection of claims 5-8, 10, 11, 13-15, 17, 20-22, 24, and 27-29 under 35 U.S.C. § 103(a) as being obvious over Funaki and Berke is reversed.

The Examiner's rejection of claims 9, 16, and 23 under 35 U.S.C. § 103(a) as being obvious over Funaki, Berke, and Erickson is reversed.

Appeal 2009-000033  
Application 10/020,483

The Examiner's rejection of claims 12, 18, 19, 25, 26, and 30 under 35 U.S.C. § 103(a) as being obvious over Funaki, Berke, and Wu is reversed.

REVERSED

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